DOCUMENT RESUME

ED 399 397 CE 072 482

AUTHOR Hernandez-Gantes, Victor M.; And Others
TITLE Fostering Entrepreneurship through Business Incubation: The Role and Prospects of Postsecondary Vocational-Technical Education. Report 3: Guidebook of Opportunities for Two-Year Technical Colleges.
INSTITUTION National Center for Research in Vocational Education, Berkeley, CA.
SPONS AGENCY Office of Vocational and Adult Education (ED), Washington, DC.
PUB DATE Aug 96
CONTRACT V051A30003-96A; V051A30004-96A
NOTE 59p.; For related reports, see CE 072 480-481.
AVAILABLE FROM NCRVE Materials Distribution Service, 46 Horrabin Hall, Western Illinois University, Macomb, IL 61455; phone: (800) 637-7652 (order no. MDS-727: $6).
PUB TYPE Reports - Research/Technical (143) -- Guides - Non-Classroom Use (055)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Business Administration; Case Studies; *College Role; *Community Development; *Economic Development; Educational Research; *Entrepreneurship; Guides; Role of Education; *School Role; Sex Fairness; Small Businesses; Technical Institutes; *Two Year Colleges; Vocational Education
IDENTIFIERS *Business Incubators

ABSTRACT

This guidebook describes opportunities for the participation of postsecondary technical institutions in the economic and entrepreneurship development of urban, suburban, and rural communities. Section 1 describes the organization and format of the guidebook. Section 2 suggests these strategies for establishing a business incubator: organizational and funding schemes; operational rules; business financing; consulting service; and networking opportunities. Section 3 outlines suggestions to offer education and training opportunities in business incubation, including early assessment of the psychological preparation of individuals, course design, and instructional formats. Section 4 describes other opportunities to participate in community development, including business consulting services, specialized training and demonstration services, facilitation of international trade, and assistance in technology transfer and development. Section 5 examines six strategical areas in the involvement of two-year colleges in developing education and training curricula on entrepreneurship: structure of coursework, content development, instructional approaches, use of business plans, fostering an understanding of global competition, and curriculum options. Section 6 presents three recommendations for a productive school-to-work transition: exposing students to business environments, providing hands-on Appendixes contain 18 references and 13 sources of support. (YLB)

ED 399 397

NCRVE

National Center for Research in
Vocational Education

University of California, Berkeley

FOSTERING ENTREPRENEURSHIP THROUGH BUSINESS INCUBATION: THE ROLE AND PROSPECTS OF POSTSECONDARY VOCATIONAL-TECHNICAL EDUCATION

REPORT 3: GUIDEBOOK OF OPPORTUNITIES FOR TWO-YEAR TECHNICAL COLLEGES

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☒ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

BEST COPY AVAILABLE

Supported by
the Office of Vocational and Adult Education,
U.S. Department of Education

CE 072 492

This publication is available from the:

National Center for Research in Vocational Education
Materials Distribution Service
Western Illinois University
46 Horrabin Hall
Macomb, IL 61455

800-637-7652 (Toll Free)

FOSTERING ENTREPRENEURSHIP THROUGH BUSINESS INCUBATION: THE ROLE AND PROSPECTS OF POSTSECONDARY VOCATIONAL-TECHNICAL EDUCATION

REPORT 3: GUIDEBOOK OF OPPORTUNITIES FOR TWO-YEAR TECHNICAL COLLEGES

Victor M. Hernández-Gantes
Robert P. Sorensen
Alejandro H. Nieri

Center on Education and Work
University of Wisconsin-Madison

National Center for Research in Vocational Education
Graduate School of Education
University of California at Berkeley
2150 Shattuck Avenue, Suite 1250
Berkeley, CA 94704

Supported by
The Office of Vocational and Adult Education,
U.S. Department of Education

August, 1996 MDS-727

FUNDING INFORMATION

Project Title:	National Center for Research in Vocational Education
Grant Number:	V051A30003-96A/V051A30004-96A
Act under which Funds Administered:	Carl D. Perkins Vocational Education Act P.L. 98-524
Source of Grant:	Office of Vocational and Adult Education U.S. Department of Education Washington, DC 20202
Grantee:	The Regents of the University of California c/o National Center for Research in Vocational Education 2150 Shattuck Avenue, Suite 1250 Berkeley, CA 94720-1674
Director:	David Stern
Percent of Total Grant Financed by Federal Money:	100%
Dollar Amount of Federal Funds for Grant:	$6,000,000

Disclaimer:

This publication was prepared pursuant to a grant with the Office of Vocational and Adult Education, U.S. Department of Education. Grantees undertaking such projects under government sponsorship are encouraged to express freely their judgement in professional and technical matters. Points of view or opinions do not, therefore, necessarily represent official U.S. Department of Education position or policy.

Discrimination:

Title VI of the Civil Rights Act of 1964 states: "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance." Title IX of the Education Amendments of 1972 states: "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving federal financial assistance." Therefore, the National Center for Research in Vocational Education project, like every program or activity receiving financial assistance from the U.S. Department of Education, must be operated in compliance with these laws.

PREFACE

This is the third in a series of three reports on the role and prospects of two-year colleges in promoting community development through business incubation and related services. This report presents a summary of opportunities to expand the contribution of community colleges in economic development through business incubation and related services. The research base for this guidebook derived from a national survey of entrepreneurs and managers in business incubators operating under different sponsorship arrangements, including support from two-year colleges (see Report 1, Hernández-Gantes, Sorensen, & Nieri, 1996a), and from case studies featuring business incubators operating under contrasting settings and organization schemes (see Report 2, Hernández-Gantes et al., 1996b).

We would like to acknowledge the cooperation of Dinah Adkins, Executive Director of the National Business Incubation Association; Gregg Lichtenstein, Philadelphia; and Peter Bearse, Gloucester, Massachusetts. All three of these individuals were extremely helpful in identifying critical issues, focusing for us the research already completed, as well as identifying a cross section of incubator candidates for the case studies. They also critiqued the survey instruments that went to all incubator managers and selected clients within those incubators. Their input helped us develop a vision for designing this guidebook which we thought would be helpful for two-year college administrators and instructors interested in economic development through business incubation.

Our many thanks to all the people in the field that we visited around the country, including incubator managers, clients, support staff, administrators and faculty of those institutions, agencies, and business incubators. Their insights were critical and very useful in completing this project. The contribution of L. Allen Phelps, Director of the Center on Education and Work, is also recognized. We appreciate his advice, guidance, and his detailed review of project materials.

EXECUTIVE SUMMARY

This guidebook summarizes a number of opportunities for two-year colleges to foster community development in the context of business incubation and entrepreneurship education and training programs. These include strategies to develop human resources with a focus on entrepreneurship, partnerships with business and industry, and facilitation of school-to-work-to-business ownership as an alternative career path. Five areas are addressed in this guidebook:

1. The following strategies are suggested for consideration in establishing a business incubator: (1) organizational and funding schemes, (2) operational rules, (3) business financing, (4) consulting services, and (5) networking opportunities to provide a productive entrepreneurial environment for small business owners in business incubation.

2. A set of suggestions are outlined to offer education and training opportunities in business incubation. Suggestions range from the early assessment of the psychological preparation of individuals interested in starting up a business to outreach opportunities in the community. Course design and instructional formats are also highlighted here.

3. Other opportunities to participate in community development are described, including the provision of business consulting services, specialized training and demonstration services, facilitation of international trade, and assistance in technology transfer and development.

4. The involvement of two-year colleges in developing education and training curricula on entrepreneurship is guided by an examination of six strategical areas: (1) structure of coursework, (2) content development, (3) instructional approaches, (4) use of business plans, (5) fostering an understanding of global competition, and (6) curriculum options.

5. In the context of current education reforms, three recommendations for preparing students for a productive school-to-work transition or for assisting individuals in making a successful transition to business ownership are presented. These strategies involve exposing students to business environments through various partnership arrangements, providing hands-on learning experiences grounded on

entrepreneurial activities, and making efforts to increase the participation of minority and female students in the business world through focused assistance.

A list of sources of support is provided for those interested in more detailed information on these working strategies to foster community development through expanding the role of community colleges.

TABLE OF CONTENTS

Preface i
Executive Summary iii
Background 1
Organization 1
Format 2
Establishing a Business Incubator 3
Why Support Business Incubation? 3
Organization 3
Funding 6
Operational Rules 7
Business Financing 9
Business Consulting Services 10
Networking Opportunities 12
Providing Education and Training Opportunities in Business Incubation 15
Fostering Entrepreneurship 15
Assessing the Psychological Aspect 15
Course Design 17
Content 18
Delivery 19
The Business Plan 20
Outreach Activities 23
Supporting the Business Community 25
Fostering Community Development 25
Business Consulting Services 25
Education and Training Services 28
Facilitating International Trade 30
Technology Transfer and Development 32
Two-Year College-Based Education and Training in Entrepreneurship 34
Structure of Coursework 35
Course Content 36
Instructional Delivery 37
Understanding the Implications of Global Competition 39
Curriculum Options 40
Facilitating School-to-Work-to-Business Ownership Transition 41

Easing the Transition to Business Ownership 41
Exposing Students to Business Environments 42
Providing Hands-On Learning Experiences 43
Targeting Minority and Female Students 44
Final Remarks 45
References 47
Sources of Support 49

BACKGROUND

During 1993-1994, a national survey of business incubator managers and entrepreneurs in and out of business incubation was conducted to gain a shared understanding of entrepreneurship and of the extent of support for business incubation and entrepreneurship at the national level (see Report 1, Hernández-Gantes, Sorensen, & Nieri, 1996a). Concurrently, nine case studies were conducted to gain in-depth insights on the extent of the involvement of postsecondary technical institutions in economic and entrepreneurship development through business incubation and educational opportunities in the community. Participant sites represented urban, suburban, and rural locations distributed across the nation and serving diverse populations (see Report 2, Hernández-Gantes et al., 1996b).

Several opportunities to foster community economic development were identified in terms of strategies to develop human capital resources with a focus on entrepreneurship, participation with business- and industry-related services, and facilitation of transitional experiences from school-to-work-to-business ownership as an alternative career path. This guidebook summarizes these opportunities from a practical standpoint to assist and inform administrators, instructors, and students with an interest in entrepreneurship and community development. In a time of intensive educational reforms, the main objective of this guidebook is to bring research results closer to a working understanding of practical applications and considerations for sound program implementation.

Organization

This guidebook describes opportunities for the participation of postsecondary technical institutions in the economic and entrepreneurship development of urban, suburban, and rural communities, and is organized into six major sections to facilitate the identification and presentation of strategies, a description of examples, and a list of the resources available.

The purpose of this organization is to help administrators

- explore the feasibility of particular efforts reported here.

- identify opportunities for implementation.
- become aware of the potential limitations and problems involved in launching their projects.
- have access to additional information in terms of resources available to use as working references, contact persons, materials, and institutions which may help facilitate implementation processes.

Format

The format of the guidebook is designed to provide the reader with easy-to-use information enriched with brief, yet comprehensive descriptions of working strategies for each of the major areas identified in the guidebook. Each major section is briefly introduced to provide a framework for the inclusion and description of a particular set of opportunities for participation in community and entrepreneurship development in the community. On the same page, an index of key strategies for implementation are identified for subsequent reference.

Each strategy for implementation is outlined step-by-step and characterized with descriptions based on the personal insights of business incubator managers, entrepreneurs in and out of business incubation, college administrators, instructors, and students. All in all, these strategies are based on a series of comprehensive "real world" experiences leading to practical applications and an understanding of practices throughout the United States.

At the end of each section, a list of resources, which includes a description of services, contact people, reference materials, and agencies, is provided. Given this format, the reader can use this guidebook following a sequential examination to build an overall understanding of the potential possibilities and limitations or go directly to individual strategies and review them without losing any coherence in the content.

ESTABLISHING A BUSINESS INCUBATOR

Why Support Business Incubation?

Business incubation offers one of the most comprehensive strategies to foster entrepreneurship in the community, help create jobs by supporting new business ventures, stimulate growth by promoting a diversification of business opportunities, act as an agent to revitalize rural areas or depressed neighborhoods, and facilitate the transition to business ownership for students and workers seeking a new career path.

Business incubators may focus on commercial space at a low cost and a variety of business services to assist entrepreneurs in the earlier stages of business development (NBIA, 1991). Business incubators can also provide opportunities to integrate education and training with a focus on entrepreneurship, business, management, new competencies demanded in the workplace, and the training of employees from small firms operating in business incubation or in the community (Campbell, 1987). Further, business incubation serves as a vehicle to provide consulting services and stimulate business alliances in the community.

Although the benefits of this participation are many, the contribution of community technical colleges is actually rather modest. In 1991, out of 500 members in the National Business Incubation Association (NBIA), the total number of incubators primarily sponsored by these institutions was only 25. Thus, the question is how can community technical colleges get involved in business incubation? Seven strategies have been identified and presented here for that purpose.

Organization

Several organizational formats can be found in business incubation. The reason for an incubator's existence varies from case to case. A number of economic factors (e.g., plant closings, companies moving to other countries, global competition, high unemployment rates, and inflation) motivate local private and public agencies to offer opportunities to develop new jobs through the creation of small business enterprises. With this in mind, partnerships among local governments, social agencies, economic development groups, and other groups and individuals come together to alleviate these

problems affecting communities by creating small business incubators, also known as "change agents" (Campbell, 1987).

✓ Usually, the justification and leadership to create a business incubator come from key leaders in the college or community who lobby and champion the idea. This leadership—especially within the college—is essential to support and set in motion the necessary steps to start a business incubator. A first natural step, once the leadership has been identified and used to promote further action, is to set up a task force to study in greater detail the opportunities and implications for setting up a business incubator. Task force members should include college administrators at various levels, bankers, faculty representatives, and other key stakeholders from the college and the community. Derived from the work of the task force, a committee can be formed to then take action on the organizational set up of the business incubator.

✓ One of the first steps of the organizational committee is to hire a manager for the incubator. It is advisable to hire this person at an early stage to have him or her fully participating in the conceptual organization of the incubator. This way, the manager grows with the incubator in tune with the resources and circumstances appropriate to the community and the college. At this point, the work of the committee may be terminated and delegated to the manager with the help of an ad hoc steering committee or a board of directors. However, in some instances, other informal arrangements without steering committees may work.

✓ One way to gather organizational ideas is to tour business incubators established in the area or in other states—if possible—to assess the differences in organization and operation. Every community is different, however, even though physical and social descriptors may be similar. The objective is to develop the best organizational set up possible, based on the resources and commitment available.

✓ In large cities, the best organizational arrangement appears to be a comprehensive approach to business incubation, including commercial space at low rates; clerical and office support; consulting services directly related to business management; and services needed for expansion, growth, product development and innovation, and even getting into international trade. In small communities, a more basic approach is usually found. The focus is to provide commercial space complemented by office and clerical support and

management consulting services. The provision of educational and training activities is found in both comprehensive and basic approaches to business incubation under various formats. For instance, the Institute for Economic Development, which is located in a large metropolitan city in the South, offers an array of services which are available to both the clients at their business incubator and the general public or private corporations. The director of the institute explained that,

> Among the various services that our college district has housed under the roof of the Business Institute, we have the Small Business Administration funded Small Business Development Center which provides help to anybody who wants to start a business [all the way from] getting the business name to helping him or her set up a partnership. We also have the Center for Government Contracting, the International Business Center, the Job Training Center, the Business and Professional Institute, and the Business and Technology Center, all of which are designed to support economic development in our district, from assisting small business development to providing support services to corporations around here.

At another site, the manager of a small business incubator located in a large Native American reservation in the Northwest added his experience on the organization of services:

> The first phase of this program was to offer business training in what we call the 14-week Greenhouse Class. And it's really a small business management course . . . where we basically discuss all the issues that somebody wanting to start and operate a small business would face—everything from how to keep your books, tax compliance, budgeting, money management, you know, everything right. We bring various instructors, but typically we try to find someone who knows something about Indian culture or someone who has worked in some capacity with the tribe.

✓ In terms of staffing, it is clear that the best organizational arrangement is to have the managers fulfill coordinating responsibilities to provide quality services to incubator firms. In many instances, due to limited resources or commitment, the managers are forced to spend most of their time in building maintenance rather than in developing an entrepreneurial environment for incubator clients. The best arrangement may be to have a lean staff organization to provide for permanent and ongoing basic services (e.g., clerical support; troubleshooting, including building maintenance) and rely on external consulting services (e.g., professional, volunteer sources) to provide specialized consulting services and education and training opportunities.

No matter what organization and structure is developed, it should focus on what fits the situation. An incubator that proposes to reach out to a minority community will vary greatly from one with an emphasis geared toward technology, as described in the examples discussed previously.

Funding

✓ The availability of funds also varies from incubator to incubator. Only in rare instances is there a 100% commitment from one source. For example, a Small Business Development Center (SBDC) in the Northwest is financed by tribal funds, and the financing for an expansion project will follow the same pattern. In some cases, local funds are committed by the local government in conjunction with community colleges, universities, local economic development agencies, and other ad hoc partnerships. On occasion, these partnerships obtain funds through economic development and capital fundraisers, and in the case of for-profit incubators, from rent revenues or consulting services to firms in business incubation. Incubators thus funded must make an effort to increase revenues to continue in operation. The drawback is that managers are distracted from consulting services as they pay more attention to fundraising and public relations activities. The following cases illustrate various funding arrangements:

- The Institute for Economic Development which is located in a major city in the Southwest, obtained its funding from the board of trustees of the local community college. Funds from the SBA were also used to create the SBDC network.

- A nonprofit incubator, which is located in a large city in the eastern United States, obtained its funding through the participation of a local community development corporation and another community-based training organization which formed a limited partnership.

With incubator centers facing the challenges of raising adequate funding, it is appropriate to address some of the issues outlined by Lavelle and Bearse (1992). First, Lavelle and Bearse warned about the problem of undercapitalization; sometimes the decision to proceed with plans to start business incubation activities is forced by political pressure or by overestimating the commitment of sources for capital. This is particularly problematic for projects relying on grant monies or government subsidies. Thus, assuring

both the commitment and availability of funds before starting up a business incubator is a must to ensure the chances for the success of the entire project.

Another issue identified by Lavelle and Bearse is the excessive financial burden that may arise due to high acquisition and renovation costs. This problem may be further complicated by a high overhead or high salaries, resulting in an undercapacity to reach a break-even point. These problems can originate from poor management and accounting practices—for example, if staff and administrative costs are allocated over different programs, creating a financial burden on the few funding sources. Obviously, maintaining healthy management of finances is as important as assuring adequate funding to preserve the chances for the continuing funding and credit worthiness of the incubator.

Operational Rules

The requirements to become a client in an incubator vary according to the type of incubator, entrepreneurial climate, sponsoring agency regulations, and other factors which depend on specific circumstances. Usually, the operational rules include enrollment, duration of stay, and exit policies.

- **Entry Rules**

  As a rule of thumb, nonprofit, entrepreneurial development-based incubators would in most cases require a well-planned business plan as an entry requirement, while others may want to see a well-developed business idea in lieu of a business plan. Although the latter requirement may not be as popular as the former, it provides the incubator manager and the individual client with the framework to work with and to turn it into a functional blueprint for business development. Entry procedures require the full commitment of the incubator manager to support the efforts of the entrepreneur who shows a strong personal and financial commitment to succeed but who needs assistance in developing a business plan.

- **Additional Screening Rules**

  In some cases, the requirement of a business plan as an entry policy would force entrepreneurs to have a solid and serious attitude about their investment and be given an entrepreneurial opportunity for success. Sometimes this requirement is matched with other operational rules designed to assure clients of a fair opportunity

to succeed; that is, clients may be required to sign on to a package of management assistance to strengthen their strategic development plan. The purpose is to help incubator clients solve small business problems while still at a manageable stage such as conflicts with start up capitalization, product development, marketing research, personnel selection, and other decisions affecting their business ventures. For instance, an incubator in a semirural setting in the South required a well-defined business plan as part of its entry criteria, coupled with mandatory attendance to monthly meetings and/or seminars designed to strengthen the small business owners' abilities to manage their businesses more successfully.

- **Duration of Stay**

  The rules for the duration of stay vary according to the philosophy of the business incubation. Introducing a policy to gradually increment rent for commercial space on an annual basis appears to be an appropriate procedure to motivate incubator firms to move out of business incubation. During their stay, incubator firms can expand their operation by renting more space and taking advantage of all services offered by the incubator. In some instances, incubator firms are allowed to stay in incubation for long periods of time as justified by the number of jobs they support.

- **Exit Policies**

  Exit criteria or requirements to graduate from the incubator are flexible in most cases. Some incubators may require a lease or contract renewable annually, semi-annually, or in some cases, on a month-to-month basis. Although this requirement may not be negotiable, some incubators will work with individual entrepreneurs to find the best solution if the lease or rental agreement would interfere with the client's future success. Sometimes clients have been known to have returned to the incubator after "graduation" in order to offset the prevailing market's rental demands or other economic conditions that were not anticipated such as rapid growth, high payroll, high-debt repayment schedules, and, in general, unmanageable business conditions which are placing their ventures in jeopardy. Incubators take these cases on an individual basis and may require specific rental conditions as criteria for re-entry. Some rules for entry or exit in incubators are determined by the entrepreneurial spirit or climate predominant in settings such as tribal or other minority-based economic development centers. The nature of the requirements in these cases depends on location, type of incubation (e.g.,

incubators without walls, tribal councils), and sponsorship organization (e.g., nonprofit minority associations, government-funded women/minority incubators).

Entrepreneurs renting or leasing space in incubators with stringent rules may find these conditions not conducive to their businesses' advantage, but this may be the only opportunity they are given to start or continue their business ventures. This situation may be true in incubators where space is at a premium or when clients with successfully proven businesses are recruited to provide steady rental revenues.

Business Financing

✓ The adequate financing of a small business is fundamental to its success. However, adequate financing is difficult to obtain, especially for new entrepreneurs. Further, it appears that during the earlier stages of business development, entrepreneurs do not have a realistic view of their capitalization and/or the operational needs for their business. Here is where incubators are key in assisting their clients in making an adequate assessment of their financial needs. Needless to say, the completion of a realistic business plan becomes the first step in obtaining adequate financial support, and funding schemes implemented by some incubators are instrumental in assisting small businesses.

✓ Some business incubators have established in-house business loan and grant programs to complement available bank and/or government-guaranteed bank loans. For instance, in the case of an incubator in the Northwest, the incubator manager, with the help of the tribal council, set up an in-house program to facilitate capital to new entrepreneurs in the form of loans and grants. The innovation of this program is based on the fact that it was designed and set up with the same requirements and paperwork as the SBA.

A different approach was utilized by an incubator in the South where the local branch of the SBA trained bankers on the SBA requirements and related paperwork at their facilities. The bankers welcomed this approach, since SBA traditionally requires extensive paperwork from banks and customers. Another business incubator, located in a rural area of the Midwest, created a loan program to assist entrepreneurs with start-up costs once they qualified for the incubation process. This program is called SELF—Self-Employment Loan Program—and provides up to $5,000. Even though this is a small amount, the center

manager explained that it is a "program to help them get started, and we try to work with them as much as we can in terms of giving them some space at the center for meetings."

Business Consulting Services

✓ Consulting services to firms in business incubation are provided as a complement to commercial space and office and clerical support. These services may be delivered by incubator staff, volunteers, and/or outside consulting firms. The prevailing limitations of incubator management arrangements, such as staff involvement in fundraising activities to support the incubator, seem to detour the incubator's mission to provide entrepreneurship opportunities. This situation reduces, in many instances, the provision of adequate consulting and training activities to incubator clients. Thus, other alternatives have to be considered, including the utilization of volunteer services from nonprofit organizations, staff from government agencies (e.g., SBA, IRS), bank representatives, successful entrepreneurs, and private consultants.

✓ Experts in the field of business and entrepreneurial development in business incubators are sometimes contracted to provide managerial support services to both incubator staff and clients. For incubator clients, these contracted services are usually provided as part of the lease agreement or for a fee. In other cases—such as with an incubator in a large metropolitan city in the Southwest—incubators have a pool of experts who are willing to serve as presenters in their seminars, workshops, and other training activities for free. This participation of external consultants appears to attract more people into the center for help in how to start a successful small business in their community.

✓ Volunteer services from nonprofit organizations are also used to provide consulting services. Consulting services from the Service Corps of Retired Executives (SCORE) is one of the most popular because it provides free access to experienced consultants on a wide range of topics related to entrepreneurship and business management. Just keep in mind that these services may not be available at times (e.g., when consultants vacation), but this may be worked out with some creative scheduling with the local SCORE office.

This strategy of using the services of retired executives to provide free business advice to small business was begun by a member of the DuPont family in 1950. SCORE

officially began operations as part of the SBA agency thirty years ago. This cadre of well-intentioned executives has mushroomed to a group of 13,000 executives who provide services in 300 U.S. chapters. In 1993, SCORE assisted 300,000 small business firms. It offers workshops, seminars, and one-on-one business consultations free of charge. Advice given may vary from bookkeeping and how to write business plans, to marketing new products in the global economy.

✓ Other volunteer consulting services may be accessible through working partnerships with local banks, government offices (e.g., IRS, SBA), chambers of commerce, industry, and entrepreneurs in the community. Staff and individuals from these sources provide valuable expertise on timely and relevant topics in business development at little or no cost. Sometimes paying travel expenses is sufficient to keep these connections in place.

✓ Using private consultants to deliver consulting services—and in some instances manage the incubator operation—is another alternative. When college staffing is not possible, or when the available expertise is limited, this option appears to work well, especially if private consultants are in the business of incubation themselves. The following examples illustrate this case:

- The Business Innovation Center, located in a large metropolitan city in the East, contracted the services of a well-known incubator conglomerate to provide management and clerical services to the development center. The incubator manager runs the day-to-day support activities of clients, including marketing strategies, financing an expansion program, and so on, basically working with clients to develop their business plans while in incubation.

- The Business Enterprise Center, which is located in a small suburban community in the Southwest, uses a variety of resources to provide nurturing support to its clients. Much of this service is provided on a free basis. A group of retired executives, staff from the local SBA office, bankers, faculty from the college, and other volunteers provide assistance to the incubator clients, in addition to the clients' mandatory attendance at monthly workshops/seminars as part of their lease agreement.

✓ In general, basic consulting services must cover all aspects of managing a business from keeping accounting books to the management of financial resources. Assistance in expansion and/or growth is an area that deserves special consideration given the fact that entrepreneurs may overlook this stage of the operation. Incubator staff should be aware of this situation to help entrepreneurs meet their needs and solve problems. For instance, two incubator managers shared their experiences:

> Let's say that you're Company X, and you need legal advice. We'll give you the first hour free of charge, sort of a taster . . . the rest is provided by lawyers who have been with the [management] firm for ten years. the charge then is below market rates. And we'll give you efficient legal advice in terms of your small business needs.
>
> In terms of growth, one of the areas the clients need the most help is in hiring personnel. I have right now four start-ups . . . they're all just business owners, but for the last two months, they are at the growth level where they've had ten contracts, and they're ready to go out and hire additional employees, but they don't know what to do. So that's where we have stepped in and provided the technical assistance . . . We have set them up with our personnel director and the college district so they can learn the thousands of tax questions on their business.

✓ A complementary alternative to individualized consulting services may be the provision of low-cost training alternatives such as self-paced instructional programs or materials, computer interactive programs, and free or low-cost college- or university-sponsored business training seminars and/or workshops.

Networking Opportunities

✓ Exposure to opportunities for entrepreneurial development is one form of integrating the work of preparing entrepreneurs for the setting up of a successful business. This experience can be facilitated by establishing either formal or informal connections with key players and institutions in the community. This process requires a more proactive participation in strategic planning, the development of broad-based community partnerships, and supporting networking activities. Participation in networking activities is a natural role for business incubators because it connects entrepreneurs in and out of business incubation with key stakeholders in the community. Networking is an activity that must be developed and not necessarily assumed to take place within an incubator setting. Every entrepreneur has extensive and demanding activities to attend to each day in the

operation of his or her enterprise; therefore, the leadership of the incubator must spend time fostering and promoting the development of networking activities within the incubator. Once a networking structure has been developed, it will more than likely take on a life of its own; that is, members will refine it and come to the conclusion that networking is probably one of the most important services provided by the incubator.

✓ A successful practice in promoting networking is to set up regular meetings where entrepreneurs in business incubation have the opportunity to discuss formally and informally the topics of common interest. Through these meetings, networking relations develop, and profitable interactions are established. In a way, entrepreneurs serve as consultants to one another about problems they have previously experienced. Further, business alliances can be created, and information is exchanged for immediate applications. Concurrently, the benefits of these in-house networking activities are informally extended to the daily interactions entrepreneurs have in the common areas of the incubator.

✓ Networking opportunities with external parties are commonly established by incubators through periodic meetings with representatives of the local business and industry and agencies supporting economic development. Breakfast and/or lunch meetings are promoted and scheduled to discuss current, relevant topics of interest for entrepreneurs and, in general, serve as a forum where the voice of those interested in economic development is heard.

✓ Formal and informal partnerships as a means to connect one or more players with an incubator facility offer an opportunity to access the consulting services and networking opportunities previously discussed. Developing partnerships with educational institutions is an example of these connecting activities. Integration of entrepreneurship in secondary school curriculum, for instance, may facilitate these educational connecting activities needed to expose youth to the concept of business development and business opportunities. This can be accomplished while integrating academic curriculum within a vocational context.

✓ As emphasized above, it is important for managers to develop key partnerships in fostering and promoting the development of networks. In 1993, Lipnack and Stamps offered a set of suggestions for successful teamwork, partnerships, and networks. First, they suggested that without a constantly visited, clear purpose, teams, partnerships, and

networks can collapse. A sense of mission unifies the group. Second, no group can function well without individual members who demonstrate the voluntary commitment and capacity to work interdependently. Above all, they must want to do it. Third, frequent and timely communication between members is critical. If face-to-face meetings are too few, or communications systems (voice-mail, e-mail, FedEx) are inadequate, the synergy will not materialize. Ongoing, voluntary interaction between members sustains the partnership. Fourth, networks are deliberate acknowledgments that no one person can (or needs to) do it all. Teams succeed when they rely on more than one person to play a leadership role. Leadership development must be nurtured in successful enterprises. Leadership is a function, not a job title, and may be demonstrated by individuals who assume specific roles in the group or assume them when the situation requires it. Finally, it is essential to manage the flow of information. When teams do not keep their constituents informed, they run the risk of losing touch with the organization as a whole. The multiple connections to different people and levels within the participating organizations must be sustained.

✓ In fostering and developing networking/connecting activities, Lichtenstein (1992) suggested several variables that can be used by an incubator manager. These variables include the types of businesses, the personal characteristics of entrepreneurs, the stage of their firms' development, space or social distance, the existence and design of forums, the presence of a critical mass of firms, norms and attitudes, the actions of key individuals within a network (in this case, the incubator manager), and time.

PROVIDING EDUCATION AND TRAINING OPPORTUNITIES IN BUSINESS INCUBATION

Fostering Entrepreneurship

According to the findings from a national survey of business incubators (Hernández-Gantes et al., 1996a), the majority of managers spend their time in building maintenance and fundraising activities and have little time left for activities leading to fostering entrepreneurship (e.g., individual counseling).

Entrepreneurs in business incubation report that the major incentive to join an incubator is to gain access to commercial space at low rates. A second consideration is the availability of clerical support and basic office equipment. Consulting services are ranked in third place, while education and training is usually the least important consideration. However, once entrepreneurs realize the complexity of running a business, the value of and need for consulting, education, and training opportunities increases greatly.

Some of the best education and training components in business incubation make these activities an integral part of the screening process. A key element is developing a business plan as an ongoing process to provide for a true entrepreneurial environment rather than just space at a low cost.

Seven elements of education and training are identified and described in this guidebook—from the early assessment of the psychological preparation of individuals interested in getting into business opportunities to outreach activities in the community. Course design and delivery considerations are also highlighted here.

Assessing the Psychological Aspect

✓ Jon Goodman (1994) defines an entrepreneur as "someone who gathers together resources for creative and innovative purposes to meet needs or solve problems" (p. 36). To accomplish this, entrepreneurs must develop effective and creative ways to acquire knowledge about their products, markets, and competitors. Concurrently, the personal dimension involved in this process includes a value system where hard work, understanding of how others work, the capacity to motivate others, and the ability to

weight risks and work under pressure come together to shape that intangible thing called entrepreneurship. Although there is no right or wrong psychological profile—for example, some entrepreneurs are team oriented, while others prefer to control and delegate responsibilities—an awareness of personality traits adds to the knowledge entrepreneurs need to have for "creative and innovative purposes to meet needs or solve problems." In short, it is helpful for the client to know whether he or she can stand the heat of being an entrepreneur or whether he or she needs to get out of the kitchen. Successful entrepreneurs use this information to build upon their strengths and "gather together resources . . . to meet needs or solve problems" that may arise due to identified personal limitations in order to perform the art of entrepreneurship at its best.

✓ Evaluating the psychological aspect of the person (personality profile) is a requirement at one incubator located in the West. The purpose is to identify strengths and limitations in the light of the line of business in which the entrepreneurs are anticipating being involved. A number of personal attributes inventories are available ranging from very basic tests to determine candidacy for self-employment (Sutliff & Spears, 1994), specialized inventories (e.g., leader attributes from Moss & Johansen, 1991), to more sophisticated tests where feedback is provided based on inventory scores. To determine which personal inventory to use, a brief search can be conducted at the library to identify sources and request samples.

✓ The value of assessing the personality profile is illustrated by the following case: Incubator clients at one incubator in a Native American reservation in the Northwest are provided with a 14-week small business management course called the "Greenhouse Program" as an action to support economic development efforts among the tribe members. Prospective entrepreneurs are given a personality profile test to identify strengths and/or weaknesses of these potential small business owners in relation to the kind of business for which they are best suited. This type of analysis has been well-received by the participants, including a Native American couple who went into business together who commented,

> What the personality profile showed us was that I'm really precise, and I want things done right and quick, while [my partner] just jumps right in there without consideration of the whole field. . . . The profile indicated that we were very compatible—complementary to each other—to be able to work in a business together.

✓ The understanding and application of personal psychological traits are also useful in working with others, that is, by identifying the leadership abilities needed to motivate and convince people to see and do things the way one wants things done. Thus, leadership may need some special attention in its own right. It has been found that to persuade family, bankers, customers, as well as employees, a person needs leadership skills in convincing people to move on an idea for a new venture.

Course Design

The primary components of education and training in business incubation must encompass a knowledge of the entire business operation—from start-up procedures to expansion and growth. Obviously, the technical skills to produce the goods and services of interest are usually the foundation of any business. This is followed by two other major components: business skills and opportunities to develop an entrepreneurial vision.

- **Learning About and Improving the How-To of the Business**
  Surveyed entrepreneurs considered technical competence essential to understanding how to produce or deliver goods and services. Further, technical skills are essential to remain competitive and to be able to maintain quality at a high level while keeping costs of production at a minimum level. The work required to develop a business plan is an effective tool to evaluate the adequacy of the entrepreneurs' technical knowledge. Building an education and training program in business incubation around the development of a business plan and starting with the evaluation of the technical soundness of the business idea appears to be an effective practice.

- **Business Survival Skills**
  The second major component of education and training involves the development of business skills. Entrepreneurs must have a working understanding of financial statements and be able to analyze financial data to make informed decisions about investments, payments, and the management of resources available. Entrepreneurs must be at least familiar with general accounting practices to be able to manage the cash flow, keep track of costs, and maintain books for tax purposes. Further, education and training must include opportunities to learn the value of and strategies for sound marketing and management practices. The elements of the business skills component appear to be common across the board, regardless of the community

context. In short, all entrepreneurs need education and training on how to set up shop, follow sound finance and management practices, comply with legal obligations, and prepare for expansion and growth.

- **Fostering Entrepreneurship**

  The third design component is central to the development of an entrepreneurial environment in business incubation; that is, to provide for opportunities to understand how to survive and make money given the business community climate. The design should include provisions to bring entrepreneurs, bankers, and government officials to the business incubator to share real-life situations in order to expose the in-house clients to meaningful experiences. These opportunities should help entrepreneurs develop realistic expectations and understand the subjective—yet informed—nature of making decisions based on an entrepreneurial vision and business goals. The aim of education and training will be to nurture critical thinking, creativity, and innovation, and to learn problem-solving techniques based on the experiences of other entrepreneurs.

Content

Entrepreneurs are usually interested in solving problems as problems emerge. Thus, the timing and relevance of the topics included in the three major components of the education and training design must be customized to fit the needs of the clients as much as possible. The first step is to identify the content of education and training activities. The second step is to identify real-life examples to make the education and training opportunities relevant and contemporary to entrepreneurs.

- **Identifying Content**

  One strategy to identify content is to survey the needs and wants of entrepreneurs both in and out of business incubation. This process can be conducted on a formal basis, but in most instances this is done informally through the daily exchange of ideas and consultation occurring at the incubator. Breakfast and lunch meetings where entrepreneurs and other representatives from the community attend can serve as another source of ideas to identify relevant content. Presenters, consultants, and government officials represent another way to identify content which is needed.

- **Identifying Relevant Content Material**

  A requirement of education and training activities is the inclusion of relevant material that is both needed and wanted by entrepreneurs. Content must represent real-life issues which can help prepare entrepreneurs in solving current problems or upcoming situations. The relevance of the content is essential in promoting attendance by entrepreneurs because, as one incubator manager explained,

  > They're all heading in different directions. They all have different schedules and their noses to the grindstone. They don't like to take time off to go to seminars. We know they need the information. We know that it's pertinent information for them. The trick is convincing them that they should take the time off.

Delivery

The delivery of education and training opportunities is perhaps the most critical aspect of successful programs. The most relevant and timely topics will fail to make an impact on the entrepreneurs if the delivery is not engaging and stimulating.

- **Use the Right Speakers**

  Choosing the right speaker or combination of speakers is critical in ensuring an effective delivery of education and training. Incubator managers indicated that presenters must have communication skills to deliver the material of interest. In some instances, the combination of a knowledgeable speaker and one who can inspire entrepreneurs appears to work best.

- **Use Relevant and Meaningful Examples for Delivery**

  An ingredient for effective delivery, as mentioned earlier, is the use of real-life examples so that entrepreneurs can relate to practical experiences. The use of case studies describing efforts to launch businesses, situations leading to failure, the survival of problematic situations, dealing with business regulations, and so on, is an effective way to add relevance to delivery. Further, bringing entrepreneurs to education and training activities to share their personal experiences related to the topics at hand is another effective way to increase relevance and provide meaningful examples to incubator clients.

- **Make Sure the Delivery Is Timely**

  Obviously, entrepreneurs want to learn about experiences they can readily use to solve problems or meet their current needs. Having a tax seminar in August, for instance, will not draw much interest as compared to offering the same seminar during the tax report season. Since entrepreneurs are at different stages of business development and are involved in different lines of business, careful attention to their common needs is essential.

- **Make Sure the Delivery Is Flexible**

  Another consideration for effective delivery of educational and training activities is to have a flexible schedule and format for presentations; that is, to promote attendance and make every effort to reach as many clients as possible. Entrepreneurs not only represent adult learners, but a segment of the population which is always pressed for time as well. Thus, a variety of formats, including seminars, workshops, informal talks, lunch and breakfast meetings, and so on, can attract the participation of incubator clients and entrepreneurs in general. A "quick and dirty" survey of the best scheduling options can inform incubator managers of the most appropriate times.

The Business Plan

✓ Across business incubators, the use of a business plan appears to be common practice both for management and educational purposes. Developing a business plan is a useful educational and training tool which can be manipulated to weave a series of connecting topics based on a real business idea. This is perhaps the ultimate, authentic learning experience, since all aspects involved in developing a business plan are relevant and meaningful, serve to identify the strengths and weaknesses of a business idea, and provide a comprehensive understanding of all aspects of the business. Most incubators require a business plan as a prerequisite for enrollment, but in some instances, developing this plan is part of a suggested course required to be taken prior to enrollment in business incubation. On occasion, incubators only require a business idea for enrollment and request the development of a business plan as part of an education and training program incubator clients can take once they are enrolled. When and how to use the concept of a business plan depends on the organizational operation of the incubator.

✓ The advantages of requiring the creation of a business plan as part of a course prior to enrollment in business incubation include (1) a chance for entrepreneurs to study the feasibility of their business idea, (2) opportunities to assess the strengths and weaknesses in terms of personal preparation in all aspects of the business, (3) an understanding of steps and consulting services needed to start up and operate a business, and (4) the development of a rapport with business incubator staff. All in all, entrepreneurs seem to appreciate this early experience and value the business incubation concept in terms of the opportunities provided to develop an entrepreneurial vision rather than just a source of low-cost commercial space.

✓ When the business plan is used as an educational and training tool after entrepreneurs are already enrolled in business incubators, the purpose is to refine the original business plan or idea and provide customized consulting services to meet individual needs. Thus, education and training usually work as part of a package of consulting services where the business plan is central to the business incubation experience which is complemented with traditional educational and training activities.

✓ There are a number of resources describing the necessary elements in a business plan. A quick search can provide a list of references. Materials and ideas from other incubators are also useful. There is no need to develop materials on business plans from scratch. These are already available, and all the entrepreneur has to do is select the one she or he feels is best for her or his needs. Some references and resources are suggested at the end of this guidebook. For instance, the following is an example of a business plan created by a private consulting firm, which can be further developed in a business incubation course. It stresses the need to include a number of decision points, by month, as indicated below (Williams, 1992):

Month 1

- Write business description
- Examine current financial situation
- Start business/industry research
- Set personal goals – 3, 6, 12 months
- Describe related experience
- Select type of business – retail, wholesale, manufacturing, service, or combination
- Consider form of start-up – scratch, business, purchase, or franchise

Month 2

- Select company name/address
- Research and select legal form
- Complete legal registration
- Start/complete management training
- Request information from SBA, State Small Business Center
- Start market research

Month 3

- Describe target market
- Summarize start-up costs
- Print business cards
- Arrange telephone answering
- Gain tax training and register for Federal Employer Identification Numbers
- Write product/service features and benefits
- Calculate product/service costing
- Establish product/service pricing
- Complete marketing plan

Month 4

- Establish outside advisors
- Do 12-month profit and loss projection/cash flow projection
- Set up office (including furniture)
- Estimate starting capital needs/sources
- Prepare recordkeeping system
- Complete business plan

Month 5

- Secure starting capital
- Establish business bank account
- Analyze employee needs
- Create promotional calendar
- Locate business insurance
- Write weekly time budget
- Print sales promotion literature
- Make first sales call; adjust sales message

Month 6

- Obtain inventory/supplies
- Finalize lease (if applicable)
- Complete legal needs (including contracts)
- Doublecheck phone, recordkeeping, supplies
- Apply for credit at office support suppliers (office supplies, photocopy, and so on)
- Make trial run of phone setup, sales prospecting, office layout, and so on
- Prepare grand opening announcement: OPEN FOR BUSINESS!

Outreach Activities

An important function of the educational and training activities generated by business incubators is to reach out not only to in-house entrepreneurs but also to the business community at large. Thus, the marketing of these services and other strategies to include all groups in the population is necessary to extend the benefits of education and training and to promote entrepreneurship.

✓ Marketing strategies include promotional advertising via radio, newspapers, and fliers which are more critical when the incubator is at an earlier stage of operation. Once the incubator begins to develop a networking system and a reputation, education and training services are spontaneously disseminated by word of mouth and by referrals by presenters, entrepreneurs, government agencies, and other individuals. Even though this informal dissemination process may work, it is always a good idea to maintain traditional marketing strategies (e.g., radio, newspapers ads) within the budgetary lines.

✓ Conducting outreach activities is particularly important in interesting minority and female entrepreneurs, who have been traditionally under-represented in small business ownership, in learning about business opportunities. These efforts have to be emphasized and followed up with enrollment practices targeting these groups if progress is to be made in this regard. Incubators are often pressed by the need to fill their vacant space to meet financing needs, and although there may be an interest in recruiting minority and female clients, the bottom line is to fill space available as quickly as possible, regardless of the applicant's background. Hence, special funding and management commitment may be required to offset waiting periods before space is taken by target entrepreneurs. Again,

once the incubator develops a reputation of service to diverse groups, these outreach activities are facilitated by in-house clients and individuals in contact with the incubator. Further, to assure continuous support for diversity and the inclusion of minority and female entrepreneurs, outreach activities may include the use of mentors who provide invaluable assistance and guidance to these entrepreneurs.

✓ Another strategy to reach outside the incubator is to offer educational and training opportunities at facilities which are more accessible to entrepreneurs in the community and the general public. Facilities such as meeting rooms may be provided by the chambers of commerce, local banks, government agencies, and private industry. This strategy is useful when the incubator is located in areas that are perceived as "unsafe" by area residents.

✓ Breakfast and lunch meetings represent another strategy for outreach activities. These opportunities can be combined to build a networking system within the business community (see networking section, p. 14). Since key players in the business community come together during these meetings to discuss current events and topics influencing the economy and local businesses, breakfast and luncheon meetings are an excellent forum to reach entrepreneurs and the general public and fulfill, indirectly, an educational function.

✓ Reaching out to high school and postsecondary students is perhaps an activity with a great deal of potential for educational purposes. Students can be exposed to entrepreneurial activities and even participate in internship programs to explore entrepreneurship as another career path. Cooperative programs and partnerships can be established with business incubators to support this activity. Further, in the case of postsecondary institutions that support business incubators, these opportunities can be promoted and extended to students other than those from the business department. For instance, students from technical fields may be able to identify entrepreneurial opportunities where they can use their technical expertise. It has been indicated previously that entrepreneurs in business incubation can be a valuable educational resource even through daily informal interactions.

SUPPORTING THE BUSINESS COMMUNITY

Fostering Community Development

Assuming a leadership role in community development requires a proactive participation in strategic planning and involvement in broad-based community partnerships. Because of the close ties with key community stakeholders, this appears to be a natural role for postsecondary technical institutions.

A number of community and technical colleges have already demonstrated the benefits of participating in community development by providing technical assistance to small business in the community. In 1991, for instance, 144 community colleges provided assistance through Small Business Development Centers (Carmichael, 1991). This contribution can be integrated into established partnerships with local industry to deliver workers' and specialized training; and to facilitate technology transfer and development by supporting and making available databases of resources on markets, products, and other business-related information to the general public.

Other opportunities to participate in community development efforts include the provision of business services on international trade, including international relations, trading operations, information on foreign markets, import/export procedures, and the creation of local networks of professionals to support these services. Similarly, two-year technical colleges can provide business services to assist in product development, patenting procedures, production, marketing, and management operations to local companies. Further, training and demonstration centers focusing on computer applications to business and manufacturing represent effective strategies for community development.

Business Consulting Services

Even though consulting services can be offered by making faculty available to the business community, this practice may lead to unconnected and ineffective efforts. Perhaps the best way to organize the services on a systematic basis is through two institutional formats: Small Business Development Centers and Business/Management Institutes.

BEST COPY AVAILABLE

- **Providing Business Services Through Small Business Development Centers**

  SBDCs are monitored through the U.S. Small Business Administration in partnership with public and private entities at local and state levels. In general, the goal of these centers is to assist those individuals in the community interested in starting up a business and those who are already in business with counseling, education, and training services; access to information; and by referral support to local agencies. More than 100 community colleges are already participating in this partnership, focusing on the education and training component (Carmichael, 1991). However, there are instances where this role has been expanded to include business and industry outreach programs by involving faculty and professionals in services designed to help the business community. The strategies to set up an SBDC are similar to those needed to establish an incubator:

  The first strategy requires a commitment from the college administration to support, study the feasibility of an SBDC, and raise an external commitment from community stakeholders. Internal and external commitment is important, since the SBDC will involve financial and political support from within and outside sources. Organizing a task force for this purpose seems to be appropriate. The second step is to organize an advisory board to take on the responsibility of providing direction for the center and help plan the working strategies for operation. Prospective members can include task force participants, faculty/staff, bankers, accountants, lawyers, established entrepreneurs, and government officials. The initial work of the advisory board is to help center staff clearly outline the goals of the center and the role of the partnership members.

  Once the goals and the contribution of each supporting partner have been established, a plan of action should be developed, including working strategies, timelines, professional resources available in the college and the community, and provisions to assure continuous financial support.

- **Providing Services Through Business/Management Institutes**

  This institutional format provides consulting services by establishing a college program with a comprehensive approach to economic development. Under this approach, a Small Business Development Center may only be part of this operation. The goal is to offer a variety of programs and services housed in the same facilities

to foster and serve entrepreneurial activities in the community. The strategies in setting up an operation of this type are similar to the ones described for Small Business Development Centers. However, since the scope of the services is broader, an additional strategy is recommended. During earlier stages, seek a commitment to establish a consortium of two-year colleges to spread the cost across participant members, ensure a pool of specialized faculty/staff, and increase the scope of business alliances in the community for the same purposes.

- **Areas of Involvement**
  Consulting services offered by SBDCs usually focus on start-up procedures, business management, marketing strategies, finance considerations, accounting, and sales. Institutes, on the other hand, offer a more comprehensive approach and would include all services provided by an SBDC, in addition to international trade procedures, patenting, licensing, government procurement services, contract training for local corporations, help in delivery of government training programs, and the facilitation of technology development.

- **Working with Consultants Within and Outside of the College**
  Three strategies can be followed to organize a pool of consultants. One is to work with college faculty. The second is to bring in outside professional help to manage and deliver consulting services. The third strategy is to rely on a combination of both by including volunteer and paid professionals from the community with the college faculty.

✓ Faculty members provide a diversity of backgrounds and expertise. Through consulting activities, faculty benefit from direct contact with clients and keep abreast of contemporary issues in their field. Consulting may serve as an opportunity to identify guest speakers from entrepreneurs who can offer fresh points of view to college students. This is in addition to extra income derived from consulting fees. For the SBDC or Business Institute, faculty members represent a pool of experts who can be available on campus most of the time. However, one of the problems of working with faculty is that they may not be available to clients when clients most need it. Faculty are usually time restricted due to their academic and other responsibilities. In addition to scheduling problems, depending on faculty may present other limitations such as having to pay them higher fees due to college formulas for benefits and compensations.

✓ Bringing in professional help from the community to provide consulting services and/or even to manage the whole operation is another alternative that has proven to be effective. External consultants bring a focused commitment, are fully in tune with the demands and needs of entrepreneurs, and understand the business community. The cost of this arrangement is balanced by the savings that can be derived from a less bureaucratic operation and by the bringing in of consultants on a per-need basis. The limitations may materialize in the form of loose contacts with the sponsoring college and deviations from the original goals (e.g., increasing the presence of the college in the community).

✓ These strategies can be combined with volunteer services to increase the pool of expertise at low cost, work in partnership with local agencies, increase and improve the visibility of the college, and reduce the cost of the operation. SCORE, SBA, and the IRS are just a few examples of volunteer services that can be used. The limitation with this approach is that careful logistical support must be in place to coordinate volunteer efforts. Further, some volunteers may not be available year-round (e.g., SCORE members) or may be too specialized to be used in various areas (e.g., IRS officers).

Education and Training Services

Two opportunities to expand the education and training services traditionally provided by two-year technical institutions are represented by (1) contract and specialized training and (2) job and basic literacy training. This is in response to the needs of business and industry and is based on the current population and economic trends which shape the nature of the workplace and demands for new competencies. These two opportunities appear to be best facilitated by developing partnerships with business and industry, large and small, and with government agencies supporting training programs for various purposes.

- **Providing Contract and Specialized Training**

  The strategy recommended here is to set up alliances with local business and industry to arrange for customized contract training in return for consulting or instructional services, funding, access to equipment, and/or opportunities for professional development of faculty. However, strategies to establish contract and specialized training vary according to the unique circumstances of each setting and

its players. Contract training should be approached with specific goals in mind, as in any attempt to develop a partnership with local business and industry. This effort should be developed cooperatively between the college and the prospective partner firm since its inception to assure a full-working understanding and success. One's institution may not profit directly from this arrangement, but the indirect benefits may materialize in many other forms—a win-win situation for community economic development. An example of a creative arrangement is represented by a partnership that has worked well for a rural Midwest community college and a fast-growing corporation. The company approved plans to build a facility on campus in order to have access to training and training facilities, professional services in technical areas, temporary labor (e.g., students majoring in the company's field), and an environment which lends itself to the fostering of a culture of continuous improvement. The college agreed to this arrangement and will benefit from access to equipment and technology, technical expertise, a willingness to participate in demonstration projects, professional development opportunities for faculty, and a plan to provide students with exposure to processes and practices in addition to co-op and internship experiences.

- **Providing Job and Basic Literacy Training**

Another strategy for participation in the development of human resources is to focus on new competencies and skills by serving as a broker to provide educational opportunities for displaced workers, individuals enrolled in job training programs, and other adult learners participating in government programs. New demands in the workplace have created the need to focus education and training on technology and customer-oriented processes. As the workplace becomes more competitive, a number of individuals have joined the ranks of the unemployed and other groups—minorities, immigrants, women returning to the workforce—who have traditionally been represented in low status occupations. The capacity to serve these groups effectively rests on the ability to work with government agencies and local business and industry and to facilitate or provide the education and training component of job and basic literacy programs.

The first strategy is to become proactive in education and training for employment in the community and seize the opportunities provided by current legislation. In this context, the opportunity for two-year technical colleges to play an expanded role in

preparing workers is given by the Reemployment Act of 1994. This initiative makes it possible for community and technical colleges to qualify for funding to provide counseling to displaced workers, participate in job training programs, and offer basic-skills training services in the community. Under this system, trainers are able to choose the place of training. Thus, the opportunity for postsecondary technical institutions lies in setting up high-quality programs at a low cost and in convincing interested individuals of these training opportunities. The second strategy is to re-evaluate the current resources available—the organizational structure and commitment to be able to participate, facilitate, and/or deliver training programs in the community. There are a number of possibilities and creative ways for effective participation as demonstrated by efforts implemented by some colleges. These opportunities include programs such as Job Training Partnership Act, One-Stop Career Centers, and Employment Services, which may operate in partnership or consortium format with other organizations in the community. These activities can expand or complement existing college programs such as Tech Prep, career counseling, GED programs, and continuing education services.

Facilitating International Trade

Chances are that an international component is housed either in the college's foreign language or business departments. With few exceptions, these resources will be found to be underutilized or functioning in isolation both in terms of integration within the college and in its connections with the community at large. In these times of increased global competition, each state is fighting for a piece of the foreign market to survive within the framework of an international economy, and postsecondary technical institutions can play a major role in facilitating education and training and related services in the community. Three strategies that fit this scheme were identified:

✓ The first strategy is to asses the resources available in the college and the community to integrate a multidisciplinary approach tailored to the needs of potential trade. For example, it would be helpful to know if there is interest from foreign language and business faculty, professionals in the community with expertise in international trade, support from the college administration, local business and industry, and government agencies supporting international trade. Further, it would be advisable to identify the

potential goods and services with possibilities for trading in foreign markets to bring in the appropriate technical expertise to inform the trading operation. In short, the best option would be to put together a team of players based on the available resources in the community and objects of trade. As the program grows, the scope increases gradually to include a comprehensive plan to meet the needs of those entrepreneurs interested in trading in goods and services not originally produced in the area.

✓ The second strategy involves a clear definition of the education and training component, including print and audiovisual materials for instructional and dissemination purposes. To create awareness and ongoing visibility in the community, a series of workshops and seminars should be part of this strategy. Within this strategy, the role of the interdisciplinary team should be to determine cooperatively the development of a coherent structure of participation for the common good. For instance, a course or seminar on international public relations can be team taught by bringing together foreign language and business faculty with professionals in the community who have international experience to blend practical experiences into a meaningful format for entrepreneurs. In short, the point is to have education and training opportunities with a practical focus on international relations, trading procedures, import/export regulations, and other related topics available to the public. This is a strategy which can be used in addition to the print and audiovisual materials for personal consultation or self-paced instruction.

✓ The third strategy requires addressing the nuts and bolts of international trade by offering counseling services in key areas of international trade, and research on markets, products, services, and/or procedures. These services are a natural progression of strategy number two, and at this point the establishment of an assistance center with an international focus should be considered if there is sufficient demand for its services. The strategies suggested to establish a SBDC and a Business Institute apply in this case in terms of setting up a center with defined goals and services and working with faculty and professionals in the community (please see "Supporting the Business Community: Business Consulting Services," p. 10). The aim—as in establishing SBDCs, Business Institutes, and/or business incubators—is to develop partnerships, alliances, and networks in the community to assure continuous political and financial support.

Technology Transfer and Development

Facilitating technology transfer and development is another opportunity for productive participation in economic development. Colleges across the country are already offering programs in leading technologies and can enhance their participation by assisting companies in the development and application of new technologies. This contribution can be channeled through the establishment of Technology Centers with the following goals:

- To train and retrain on the use of advanced technology.
- To transfer technology to local industry.
- To serve as demonstration sites for new equipment and manufacturing processes.
- To provide assistance to industry on technological needs.
- To help develop new technology.

✓ The steps in establishing an Advanced Technology Center (ATC) are similar to those outlined previously for business incubators and SBDCs. It would be helpful to assess the local needs, commitments, and resources when planning and designing an ATC; however, to establish an ATC is very expensive and needs a strong commitment from the college administration (Ernst & Johnson, 1991). Thus, it is recommended that visits to other institutions sponsoring ATCs are arranged once approval has been granted by the college board. The National Coalition of Advanced Technology Centers can assist in efforts to plan and design the facility, identify additional sources of funding, assist in the acquisition and retraining of staff, network with other institutions, and help in maintaining the operation in an up-to-date manner.

✓ Educational and training programs under the auspices of an ATC must offer a flexible schedule to meet the training needs of industry (e.g., night sessions, customized training). Brient (1991) reported some of the opportunities for education and training in the following areas:

- Design
- Manufacturing
- Materials science
- Hazardous materials
- Telecommunications
- Electro-optics

- Medical technologies
- Office automation
- Management (p. 20)

✓ The work on technology transfer can be designed around linkages with universities and laboratories to make information accessible to industry. The strategy here is to facilitate opportunities for local businesses to learn and become aware of technological developments which can have an impact on manufacturing processes. These opportunities can be designed to accomplish the following:

- Identify technological innovations with practical applications for local industry.
- Create awareness in the business community through formal and informal meetings, including breakfasts and lunch sessions at a nominal cost to recover expenses.
- Provide seminars offering hands-on exposure.
- Target both the decisionmakers and users of technology in the local industry.

✓ The most expensive component of an ATC is the demonstration services, including new equipment and processes, which may have an impact on local businesses. One strategy is to develop linkages with manufacturers to receive donations of equipment and computer hardware and software. Staff expertise can grow within this cutting-edge environment and provide customized services to actually work on the development of new products, equipment, and processes. The benefits of this operation are extended to students who can use computer-integrated manufacturing processes for instructional purposes. Vendors can use the ATC to expose their products and evaluate their performance and applications. Clients, on the other hand, have an opportunity to observe the potential applications of the new technology to make informed decisions when upgrading their operations.

The opportunities outlined here represent ways for two-year colleges to participate in economic development by assisting local industry in recognizing and considering alternative forms to increase its productivity. In context, an important function is to help companies assess their technological needs and develop a vision to improve the effectiveness of their operations. While some companies can use the more sophisticated services of an ATC, others only need an opportunity to select the appropriate hardware and

software to upgrade existing equipment and processes. Further, an ATC can serve as an agent to facilitate technology development either through active participation as described above or by assisting small firms in their own technological development efforts.

TWO-YEAR COLLEGE-BASED EDUCATION AND TRAINING IN ENTREPRENEURSHIP

The debate on whether entrepreneurship can be taught continues. Everybody agrees, however, on the fact that entrepreneurship programs can teach and provide emerging entrepreneurs with the technical tools to minimize the risks of creating, running, and expanding a business. One may not get the personal characteristics and visionary business talent found in college programs, but anybody can learn the basic techniques to effectively perform basic business operations—that is, to complement their own creativity, motivation, technical preparation, and business ideas.

An assessment of the personal drive and psychological preparation to start a business career path appears to be helpful for entrepreneurs. It helps to become aware of the personality traits and value-system around which people organize themselves to anticipate potential opportunities and limitations related to running a business. Newly established entrepreneurs need to know about financial analysis, accounting systems, and marketing, and must understand the practices for effective personnel management. Further, entrepreneurs must be aware of the role and opportunities brought about by global competition.

The challenge for postsecondary technical colleges is to design entrepreneurship courses in tune with the times both in terms of curriculum content and strategies to broaden their critical thinking skills. To this end, the use of business plans for instructional purposes appears to be a powerful tool in entrepreneurship development.

Structure of Coursework

In visiting the various centers involved in the case studies of this research, it appears that the most successful approach to developing entrepreneurship skills is having a structured course, including real-life applications and experiences. Under this approach, the course of study can be structured into four major components, including start-up procedures, business and management skills, and marketing strategies. An additional component should include opportunities to learn about the intangible aspects of entrepreneurship in terms of preparation for expansion, growth, and evaluation of the personal value system.

✓ The difference between a two-year college-based educational approach and education and training opportunities in business incubation is the formal structure of the curriculum. Usually, business departments already have courses dealing with some of the components outlined above. Often, though, available courses are not tailored to meet the short-term needs of entrepreneurs who would like to have both the opportunity to take individual courses or a coherent sequence which would help them start a business. When asked what would be a sound structure of coursework on entrepreneurship at the two-year college level, an entrepreneur indicated that

> It would be about five different things. One, how to research whether you think you have a viable product or service. The second one would be if you think you know how to determine where and who your market is. The third one would just be basically how to set up books and keep accounting and government records. And the fourth one would be to develop the overall business plan which really encompasses the other three. And the fifth one would be a psychological one to really talk to [students] about reasonable expectations.

✓ In most cases, short courses on how to start a business are available in continuing education programs. However, tying these initial courses into a series of continuing or more formally structured courses with a focus on entrepreneurship may assist students in developing an understanding of all aspects of business development, including how to start up a small business.

✓ The course component on business and management skills is usually available through business departments, although the focus may not be on small business development. Again, tying these existing courses into a coherent sequence of opportunities

for students and the general public interested in small business opportunities has practical and immediate applications.

✓ The component on marketing strategies may already be available through the business departments. The emphasis, though, should be in marketing strategies for products and services produced by small businesses, which can be weaved with business and management courses, and exposition to entrepreneurial opportunities (e.g., through case studies and tours of small companies).

✓ A critical aspect of an entrepreneurship course is the focus on real-life cases where the tools of the trade and the value system coalesce to develop an entrepreneurial vision. The constant emphasis on the intangible aspects of entrepreneurship addressed through a study of a wide array of cases provides students with multiple experiences about businesses which have survived through tough times, improbable ideas that have blossomed into success stories, and how apparent successes have turned into failures. Developing a business plan based on a real business idea and bringing successful entrepreneurs to the college to share their experiences with students will add to a comprehensive understanding of all aspects of business development; that is, students should realize there are things they can learn at the college to minimize business development failure, but that, ultimately, success will depend upon their value system and business vision.

Course Content

Unlike education and training opportunities in business incubation, the formal nature of college-based programs calls for a more structured approach to identify content. Two steps have to be taken here. One deals with the process of identifying content and the other with the relevance of the content to the business environment which exists in the area:

✓ It is convenient to shop around for curriculum materials to identify content and refine ideas for structuring a course of study on entrepreneurship. Contact two-year colleges and universities which are offering entrepreneurship courses and request information about the curriculum structure and content. As indicated by business incubator managers and entrepreneurs, the basic ingredients of entrepreneurship are standard across

the board. Business, management, and marketing skills are staple topics in any course on entrepreneurship. Variations on content, sequence, and emphasis are then adjusted to the conditions and context of the business environment of interest.

✓ The second step on identifying content is to further scrutinize the content to make it relevant to the contextual environment where business development is taking place. For instance, if the goal is to promote the diversification of the economy in a predominantly agricultural area, topics should address and explore ways to accomplish that—as opposed to choosing content that fits all situations. Another example would be a curriculum structured to serve inner-city business development or one that may serve business development on a reservation. In whatever case, the cultural setting must be taken into consideration when identifying the content.

Instructional Delivery

The delivery of instruction must emphasize authentic examples so that students can relate to practical applications and understand the implications for their business ideas. For this purpose, reliance on a variety of instructional approaches for delivery is necessary. These include using case studies, having diverse speakers, having opportunities for exposition in entrepreneurial environments, and using business plans.

✓ As it has been emphasized throughout this document, an important element of successful programs is the capacity to bring relevant information into education and training opportunities. Courses at the two-year college level should provide an emphasis on real-world information and materials so students can relate to practical applications. One strategy is to use case studies extensively to describe business development at the various stages from start-up to expansion and growth. See strategies for delivery of education and training opportunities in business incubation for similar ideas. Furthermore, different modes of teaching should be used within the courses and seminars. The most successful approach to these practical courses is group discussions focusing on practical issues and specific discussion sessions for small groups about problems relating to the topic at hand.

✓ Bringing the experiences of successful entrepreneurs into the classroom is another opportunity to enhance the instructional delivery. Again, similar strategies have already

been mentioned for education and training opportunities in business incubation. However, for students with little experience in business opportunities, the sharing of these experiences may be even more relevant and inspirational than for entrepreneurs in business incubation who are already developing their own experiences. Thus, careful selection of guest speakers is essential to make sure that speakers have good communication skills in order to engage students in meaningful discussions of entrepreneurial experiences while delivering the message of interest.

To help identify individuals to teach in the structured courses or seminars, a technique that is effective is to have a "volunteer night," wherein potential staff are invited in from different organizations to discuss their involvement. Not only are these volunteers potential presenters or teachers, they are also possible consultants to work with the clients of the centers.

✓ A third strategy is to provide students with opportunities for exposition to entrepreneurial environments where they can learn first-hand about the problems and considerations of owning a small business. See the section on "Facilitating School-to-Work-to-Business Ownership Transition" on page 41 for an outline of strategies.

✓ The development of a business plan can be used in some cases as the common thread interweaving the sequence of courses on entrepreneurship. This business plan can be used as the first course on how to start a small business and can be further refined through formal and informal feedback from guest speakers and two-year college staff. This development of a business plan would serve two purposes: First, it would give students a complete business plan at the completion of the course or sequence of courses. Second, it may serve as an evaluation of a client's idea for the feasibility of a business. The object of the course is to walk participants through the development of their small business plans which will help them decide on the feasibility of their ventures.

The major components of a business plan (see the example on education and training opportunities in business incubation, developing a business plan on p. 24) can be aligned with the course structure and content to make sure topics are covered in detail. Through this approach, students should be able to develop their own business plans on a step-by-step basis by building upon material covered within and across courses. A key consideration is to encourage students to identify a business idea of their own and begin

developing a business plan following the material covered in the courses. This strategy has proven to be the most successful approach to developing a meaningful understanding of all aspects of business development.

Understanding the Implications of Global Competition

Since small and large corporations are currently being affected by global competition, an awareness of both opportunities and implications should be promoted among entrepreneurs. This concept and rationale also holds true for students enrolled in business and entrepreneurship courses.

✓ Usually, there is a program somewhere in the two-year college with an interest in international affairs—trade or relations, for instance. The international component can be either offered as a separate course or integrated into the program components outlined in the previous sections.

✓ The completion of a course with an international focus can lead to an enhanced curriculum option—for example, Associate of Science degree program—for those who want to build an understanding of the opportunities and implications brought about by global competition in addition to the original sequence of business/entrepreneurship courses. These courses or seminars would also be open to the public in general and particularly to the small business owners already operating in the community.

✓ When developing a course on international trade, consideration should be given to working with the U.S. Department of Commerce International Trade Association. The course content or seminar offerings would be centered around subject areas such as the following:

- International business principles
- International marketing
- Cultural awareness for international trade
- International trade documentation
- International transportation
- International finance
- Export and import regulations

Curriculum Options

Various curriculum options can be offered to students interested in business and entrepreneurship courses. Depending upon the extent of their interest and willingness to develop an in-depth understanding of all aspects of business development, the following curriculum options should be available to them:

✓ One approach is to offer courses which can be taken individually as continuing educational opportunities, where students can come and be involved in selected topics or courses while having no interest in earning diplomas or certificates.

✓ Another approach is to offer opportunities to pursue an associate's degree in a business program area or a certification program through the community/technical college. If the associate's degree program is followed in one of the business areas, students can take their elective courses around entrepreneurship topics that would develop an emphasis in small business. Colleges that offer a selection of business associate's degree programs should make available a number of courses that relate to business such as marketing, business management, international marketing, business ethics, business organizational structures, introduction to business, business law, managing cultural differences, and entrepreneurship. The objective of the associate's degree is to bring the academic and the technological together to make the courses as practical as possible.

✓ When an entrepreneurship course is offered in a college setting for credit, it is recommended that it include a co-op or an internship component. This co-op should have specific goals for the student. In addition, the structure of such an offering must include a strong college component in the form of site visitations and co-op student seminars to obtain interaction between the students and active entrepreneurs.

✓ If a certification program in entrepreneurship is offered by the college, this should be for a specific time period or credits, usually the equivalent of one semester in length and in specific areas such as sales, marketing, business development, and management. An interesting approach to this program would be an open-ended business planning course wherein students could enter the course for as many times as they needed to develop a business plan. In this format, the instructor is more of a consultant than a lecturer. Credit hours could be assigned based on the number of projects students complete within the class

relative to their business plan. The classroom setting would be flexible so students could come in at any time during the day and work at their leisure in developing the business plan. This open-ended approach, including an open lab concept, lends itself to the development of a computer-based business plan.

FACILITATING SCHOOL-TO-WORK-TO-BUSINESS OWNERSHIP TRANSITION

Easing the Transition to Business Ownership

> . . . 80% of the folks who . . . knock on my office are looking for a new career path. They have been working for corporate America, and now they want to find a . . . new career path. And starting their own small business is the path they've chosen.
>
> Incubator Center Manager

The current educational reform movement is designed to face the challenges posed by high-tech/high-wage workplaces through connecting activities among high schools, postsecondary institutions, and local industry. This strategy is a form of investment in the development of human capital essential to support the demands of today's global economy. The educational vehicle is a form of emerging vocationalism which focuses on new competencies demanded in high-performance workplaces, the integration of vocational and academic education, linkages between secondary and postsecondary education, and a combination of school-based and work-based learning experiences. The goal is to better prepare students for the transition from school-to-work or to postsecondary education.

Based on current economic and education trends, it is evident there is an enormous potential for two-year technical institutions to expand their role by participating in community economic development within the context of emerging vocationalism and support of business career paths. That is, community and technical colleges can revisit and implement an expanded role to prepare students for a productive school-to-work transition or help individuals ease the transition to business ownership by exposing students and workers to business environments and related experiences.

Exposing Students to Business Environments

The opportunities identified through case studies involved working with two-year colleges and high schools to expose students to alternative career paths in entrepreneurial activities. The primary strategy is to use business incubators and partnerships with cooperative companies to establish tours of facilities and business environments. In this context, business incubators and incubator firms become a natural laboratory for students to explore alternative career paths by observing entrepreneurs and businesses in action.

✓ The first step is to create awareness of these opportunities within the college system or high school district. Program directors and instructors should be contacted to explain the kinds of activities that can be arranged to expose students to entrepreneurial operations as part of career guidance programs or to complement current courses with potential implications for business ownership. Two incubator managers shared their experiences:

> Another management strategy was to establish good working relationships with each of the seven campuses of the county community college system, the business divisions, in particular. The business deans usually contact the center manager to refer groups of students who are interested in becoming entrepreneurs. Usually, the majority of the students who come to the incubator from the community colleges are enrolled in business programs.
>
> Another important component of this program involves the development of working relationships with area high schools. The purpose is to promote entrepreneurship education and interest students in pursuing opportunities in developing a small business.

✓ The second step is to facilitate organized tours of business incubators, advanced technology centers, and incubator firms to expose students to business ownership opportunities. The objective must be to make students aware of the resources available and the opportunities and limitations they need to consider should they become interested in starting a business. Two incubator managers provided the following examples:

> Groups of students from each of the campuses are invited to tour the program facilities and become aware of business services and entrepreneurship-related courses offered by the institute. The program is a pilot program at the postsecondary level serving the seven campuses included in the community college district.
>
> [P]articipants in the JTPA program housed in the facilities can take advantage of internship opportunities which may turn into a permanent job for many of the students. Under this format, owners hire and pay students who have completed their four- to six-month course.

Providing Hands-On Learning Experiences

Practical experiences to facilitate school-to-work-to-business ownership can be integrated into existing curriculum in business and technical areas at both the postsecondary and secondary level.

✓ The practical context of formal and informal education and training opportunities can be enhanced by using real-life information and the development of a business plan. As two education and training coordinators explained,

> In most cases, the emphasis of seminars and workshops is in describing examples of success stories which are similar to the type of businesses clients want to start up. Examples also include common mistakes made by businesspeople. Using a business plan as a reference to stress important points is an effective instructional strategy. This strategy provides for concrete examples and helps refine business plans.
>
> The course is a self-employment training program . . . and includes topics covering the typical areas needed to start a new business. Through these topics, the course goes over 45 decision points that need to be made in starting a small business. As students put these decision points in their workbook, a business plan begins to emerge as a feasible idea.

✓ Existing programs and facilities can be upgraded to provide for the practical application and exploration of all aspects of business operations. Under this approach, students not only learn new employability skills but management and entrepreneurial skills needed to start and operate a business. An incubator manager characterized his experience as follows:

> [T]he Training Center is a vocational training facility designed to accommodate these new employment demands. [This] facility offers an IBM Information Sciences Center, a culinary instructional wing complete with a fully equipped kitchen, food preparation areas, servicing lines, food storage area, and a 1,500-seat dining room where lunch is served five days a week.

✓ Cooperative and internship programs designed in partnership with local industry and business incubator firm can provide a rich source of practical experiences where students can learn about starting and operating a business. These curriculum opportunities can function in a way similar to supervised occupational experiences and could include other creative arrangements such as those described below by two program coordinators:

> Students enrolled in the program on entrepreneurship can also obtain credits through a co-op or internship program. . . . Co-op and intern students must set up four work-related goals for the co-op experience. As part of this program, students are required to write a comprehensive report on the four work-related goals. On-the-job visitations are made with the participant students by the college staff to supervise their progress and provide any necessary feedback.

> This is a cooperative program set up with the public schools to offer artist-in-residency status to high schoolers who want to become practicing artists. Through this residency period, high school students are exposed to programs that complement existing, established, quality teaching programs allowing the students to enhance their career opportunities while getting trained in the arts.

✓ Hands-on experience can be provided through part-time employment opportunities and by having students work as part of consulting teams supervised by college instructors. Whenever an incubator client requests assistance, students may be called to participate in the consulting process. For instance, a program coordinator explained,

> The college would assign a student or two to work with the business on the specific technical problem. This service provides an effective partnership between the community and the college. Students [also] benefit from temporary and part-time employment opportunities in addition to exposure to a variety of business environments and operations.

Targeting Minority and Female Students

A number of individuals in the community—for example, students, laid-off workers, homemakers, and employees seeking a new career path—require assistance to succeed during the transitional period in exploring and establishing a small business. Of these, minority and female entrepreneurs may experience greater difficulties given the traditional lack of opportunities to recruit and support these groups interested in business opportunities. Assisting these individuals during these transitional stages represents a great opportunity for postsecondary technical education to participate in the development of the community.

- **Easing the Transition in Business Incubation**

  One strategy to target and encourage the participation of more minority and female entrepreneurs is to expose students to entrepreneurial environments with a focus on supporting minority- and female-owned businesses (see the section on "Exposing

Students to Business Environments," p. 42). Concurrently, the concept of business incubation to support these entrepreneurs should be stressed so that students can understand that entrepreneurial opportunities exist for all, regardless of the ethnic and economic background. Further, it should be made clear to students that the purpose of business incubators, small business development centers, and the provision of related services to support the establishment of new small business is to help entrepreneurs survive the early stages of business development.

- **Serving Minority and Female Entrepreneurs**

  Obviously, there must be a commitment to target and recruit minority and female entrepreneurs if efforts to encourage students are to be successful. A recruiting program, including opportunities to participate in co-op and internship programs, part-time employment, and a commitment to allocate business space for minorities and female entrepreneurs may prove effective in enhancing the participation of this group of individuals. Reflecting on this issue, an incubator manager commented that "entrepreneurial development for women and minorities remains a challenge . . . For instance, females trying to get into an engineering-oriented business area feel it is more difficult because that field is basically male-oriented."

Final Remarks

The main purpose of this guidebook is to develop a better working understanding of practical applications and considerations for two-year colleges in promoting economic development through business incubation practices. The guidebook describes a number of opportunities to foster economic development in terms of strategies to develop human capital resources with a focus on entrepreneurship, provision of business-related services, and facilitation of transitional experiences to business ownership as an alternative career path through hands-on education and training. This guidebook summarizes these opportunities from a practical standpoint to assist and inform administrators, instructors, and students who have an interest in entrepreneurship and community development. A "Sources of Support" listing is provided for additional information on contact people and agencies involved in promoting the expanded role of two-year colleges in economic development and the concept of business incubation.

REFERENCES

Brient, E. (1991). Responding to industry demands: Advanced technology centers. *Community, Technical, and Junior College Journal, 62*(2), 18-21.

Campbell, C. (1987). *Change agents in the new economy: Business incubators and economic development.* Athens, OH: National Business Incubation Association.

Carmichael, J. B. (1991). Meeting small business needs through small business development services. In G. Waddell (Ed.), *Economic and work force development* (pp. 25-30). New York: Jossey-Bass.

Coopers & Lybrand. (1992). *Growth Company Starter Kit. "How to" for business plans, financing operations.* Available by contacting your nearest Coopers & Lybrand office.

Ernst, C., & Johnson, R. (1991). Planning and developing an ATC. *Community, Technical, and Junior College Journal, 62*(2), 22-25.

Fifield, M. L., & Huhra, L. (1993). *Strengthening America's competitiveness: Profiles of leading community college international trade centers.* Washington, DC: American Association of Community Colleges.

Goodman, J. (1994, March). Myth of the gunslinger. Is entrepreneurship risky?: Not if you do it right. *Success, 41*(2), 34-39.

Hernández-Gantes, V. M., Sorensen, R. P., & Nieri, A. H. (1996a). *Fostering entrepreneurship through business incubation: The role and prospects of postsecondary vocational-technical education. Report 1, Survey of business incubator clients and managers* (MDS-893). Berkeley: National Center for Research in Vocational Education, University of California at Berkeley.

Hernández-Gantes, V. M., Sorensen, R. P., & Nieri, A. H. (1996b). *Fostering entrepreneurship: The role of postsecondary technical education. Report 2, Case studies* (MDS-895). Berkeley: National Center for Research in Vocational Education, University of California at Berkeley.

Lavelle, J., & Bearse, P. (1992, March). *Incubator-as-enterprise: High risk and hard work/high return.* (Available from Development Strategies Corporation, 47 Pleasant Street, Gloucester, MA 01930-5944.)

Lichtenstein, G. A. (1992). *The significance of relationships in entrepreneurship: A case study of the ecology of enterprise in two business incubators.* Philadelphia: University of Pennsylvania.

Lipnack, J., & Stamps, J. (1993). *The Teamnet factor.* Essex Junction, VT: Oliver Wright Publisher.

Moss, J., & Johansen, B.-C. (1991). *Conceptualizing leadership and assessing leader attributes* (MDS-187). Berkeley: National Center for Research in Vocational Education, University of California at Berkeley.

National Business Incubation Association (NBIA). (1991). *The state of the business incubation industry.* Athens, OH: Author.

National Council for Urban Economic Development. (1985). *Creating jobs by creating new businesses: The role of business incubators.* Washington, DC: Author.

Smilor, R. W., & Gill, M. D., Jr. (1986). *The new business incubator: Linking talent, technology, capital, and know-how.* Lexington, MA: D.C. Heath and Company.

Sutliff, J., & Spears, J. (1994, December 10). *Students as entrepreneurs.* Paper presented at the annual meeting of the American Vocational Association, Dallas, TX.

Williams, J. W. (1992). *Skills training and business organization guide.* Arlington Heights, IL: Creative Market Solutions.

SOURCES OF SUPPORT

Chambers of Commerce. Contact the local chamber of commerce for business information and data about the community.

Coopers & Lybrand. Various materials on business management can be obtained by contacting the Emerging Business Services at your nearest Coopers & Lybrand office.

National Business Incubation Association (NBIA). The Ohio University Innovation Center. One Resident Street, Athens, OH 45701. Executive Director: Dinah Adkins. Call (614) 593-4331 or fax (614) 593-1996.

National Coalition of Advanced Technology Centers. This is a consortium of colleges that support technology transfer and development by providing education, training, and assistance to public and private entities. Contact: Elizabeth Brient Smith at 601 Lake Air Drive, Waco, TX 76710 or call (817) 772-8756.

National Council for Urban Economic Development. You can contact the council at 1730 K Street, NW, Washington, DC 20006; call (202) 223-4735 for information on business incubators and economic development.

Service Corps of Retired Executives (SCORE). Free business counseling can be available from a group of men and women who can be contacted through the nearest SBA office.

Small Business Development Centers (SBDCs). Contact SBDCs for training and counseling services to support small businesses. Offices are located throughout the United States.

Small Business Innovation Research (SBIR). For information and to be included on its mailing list, contact the SBA's Office of Innovation, Research, and Technology in Washington, DC.

Small Business/Management Institutes. Usually these institutes can be found at universities throughout the United States.

State Business Incubation Associations. Check your State Office for Economic Development or the local SBA office for information on your State Business Incubation Association.

State/Federal Agencies. These include state offices for economic development, the Department of Commerce, the International Trade Office, and the Internal Revenue Service, among others.

Trade and Industry Associations. A listing of or associations by industry can be found in *The Encyclopedia of Associations*.

U.S. Small Business Administration (SBA). Contact your local SBA office for information on assistance to small businesses at the various stages of business development. Office of Private Sector Initiatives, 1441 L Street, NW, Suite 720A, Washington, DC 20416.